

ARE WE SAVING ENOUGH?*

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The U.S. economy has exhibited considerable vitality during the last two decades. There have been only two recessions, one of which (in 1991) was very mild. During the last five years, economic growth has occurred at a much faster pace than the rate economists previously thought was sustainable over the long run.

A significant feature of the current economic boom—one to which many observers attribute today's good economic times—is the strength in consumer demand. Unfortunately, because greater consumption means lower saving and fewer resources available for investment a surge in economic growth fueled by greater consumption is unlikely to last.

Devoting a greater share of output to consumption will squeeze saving and investment to the point where little or nothing is left for adding to, or even replacing, the nation's capital stock. Although the capital stock could continue to grow because of foreign capital inflows, low national saving will reduce Americans' share in its ownership, and capital income will increasingly accrue to foreigners. A continued dependence on foreign capital inflows will benefit future Americans less than if domestic investment were financed through greater national saving.

U.S. households may be saving very little because, in their view, resources for future consumption are adequate and secure. However, projections of Social Security and Medicare—important pillars of retirement security—suggest that financial shortfalls will begin to occur soon after the first decade of this century. Moreover, lengthening life spans imply that a failure to save adequately will worsen retiree living standards or force a postponement of retirement—both of which imply lower economic welfare.

This *Economic Commentary* examines the behavior of U.S. household and national saving during the last two decades. It analyzes households' motivations to save and discusses the role that saving plays in improving living standards. Finally, it explores how much those about to retire might need to save to adequately prepare for retirement.

SAVING IN THE UNITED STATES

The United States has experienced a sustained decline in national saving since the early 1970s. National saving—measured as the share of national output not consumed by households and the government—averaged well over 9 percent during the 1960s and 70s, but then dropped to 6 percent in the 1980s, and further to 4.7 percent during the 1990s, (see figure 1).¹

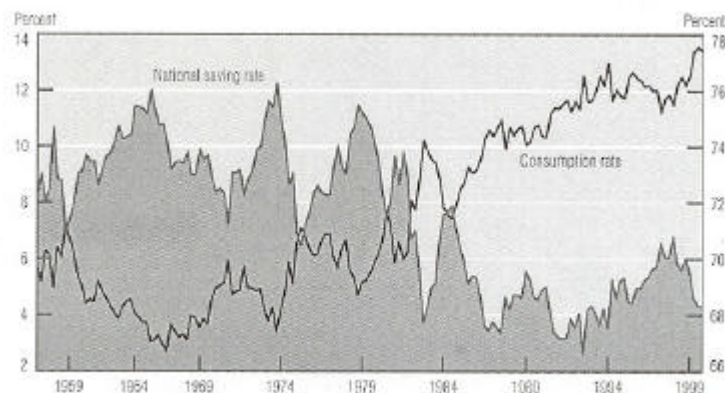
National saving can be divided into private and government saving, and private saving can, in turn, be divided into that done by households and by businesses. The conventional method of dividing national saving into its constituent parts suggests that the biggest source of decline in national saving is lower private saving. Indeed, personal saving, one component of private saving, reached an all-time low of 2.4 percent in 1999.

Lower private saving is a direct consequence of higher private consumption.² Personal consumption expenditure as a share of net national output has trended upward for three decades. This share rose from 68.3 percent during the 1960s to 76.0 percent during the 1990s. In 1999, it was 77.2 percent, suggesting that a reversal is not yet in

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sight. Despite the recent improvement in government saving via the elimination of federal deficits, national saving remains at about half its rate during the 1960s and 70s and is among the lowest in the developed world.³

**FIGURE 1 SAVING AND CONSUMPTION
AS A PERCENT OF NET NATIONAL PRODUCT**



SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.

SAVING AND INVESTMENT

Saving finances investment, and one may expect the path of net domestic investment over time to follow that of national saving. During the 1960s and 70s, net domestic investment averaged well over 10 percent of net national output. This share declined to 9 percent during the 1980s and further to 5 percent during the early 1990s. Despite a rebound since 1991, it averaged only 7.4 percent during the 1990s.

While U.S. net domestic investment has decreased over the last three decades, the decline was smaller than that in national saving because of foreigners' willingness to invest their savings in the United States. However, borrowing from abroad to finance domestic investment has considerably increased U.S. international indebtedness. The net international investment position of the United States has swung from positive 7.2 percent of GDP in 1983 to -17.6 percent today.⁴ The decline in our net investment position seems to have accelerated during the last two years, growing by almost 40 percent after 1997.

Although such huge capital inflows have helped maintain domestic investment above national saving, the increasing foreign ownership of U.S. capital has increased the share of income accruing to its foreign owners and lowered the share accruing to Americans. In addition, continued dependence upon foreign borrowing for financing investment at home may be risky since this source may dry up quickly if investment opportunities outside the United States become more attractive.

WHY SAVE?

Unfortunately, we do not live in paradise—the right kinds and amounts of goods and services do not miraculously appear before us at each instant that we desire to consume them. If we anticipate a need for resources in the future, we must be prepared to produce them or make them available out of prior production via saving. By transferring resources from the present to the future, saving helps us smooth the temporal flow of consumption in the face of irregular and variable income accruals. The starkest example of such consumption-smoothing behavior is saving for retirement—transferring consumption from the productive to the nonproductive years of one's lifetime.

Not only does saving transfer consumption across time, the accumulated wealth it creates provides opportunities to improve our living standards. If our consumption needs are secured for a sufficient length of time, savings can be invested to improve technology for producing goods and services and upgrading their quality. Hence, greater saving also enables the greater investment that is essential for increasing productivity and, ultimately, improving living standards.

A stock of wealth also enables a better configuration of the set of goods and services that we consume at a given time. We can devote some of the saved resources to purchasing lumpy goods such as houses, which are large (requiring substantial initial expenditure) and indivisible (embodying a lot of consumption services but releasing them only over a long period).

One may argue that prior saving is not essential for smoothing consumption over time because one could incur debt when income dips unexpectedly. However, debt financing is wise only if used appropriately. Using debt to purchase durable goods such as houses, for example, is relatively inexpensive because the asset purchased can serve as collateral. Obtaining unsecured consumer loans for financing general consumption is usually more expensive.

SAVING FOR RETIREMENT

During the nineteenth century, people lived less than 50 years on average. By the 1920s, better nutrition, improved sanitation and shelter, and especially medical advances increased longevity by about 15 years. Further advances in medical technology have extended our life spans by another 14 years since. The extension of the human life span—dramatic as it has been—is probably not going to cease. People will continue to live longer as a new generation of biomedical and genetic technology matures and is applied to inhibit or cure diseases and medical conditions related to aging.

In the developed world, the lengthening of human life spans has coincided with the emergence of the concept and practice of "retirement." Prior to the twentieth century, it was uncommon to think of or anticipate retirement. When Social Security was introduced in the United States with a "normal" retirement age of 65, not many individuals survived for more than a few years beyond that age. But now, the concept of "retirement" is hard-coded in the minds of most people, arguably as a result of Social Security's earnings test, which still imposes heavy tax burdens on those who continue to work and earn between the ages of 62 and 64. Moreover, private (defined-benefit) pension plans provide similar "incentives" for workers to retire early—in many cases as early as age 55.

Despite their low net worth, many older workers today consider retirement a clear possibility because of Social Security and Medicare. Indeed, many recent retirees and those about to retire have not saved much out of after-tax income because they expect to receive sufficient Social Security and Medicare benefits for the rest of their lifetimes. However, even if current benefit levels were enough to maintain their standard of living, these are unlikely to last. According to current projections, if benefits are maintained as under current law, payroll taxes will begin to fall short of Social Security outlays after 2013.⁵

Many policymakers suggest that projected federal budget surpluses could be used to shore up these programs. The surplus projections, however, are based on several optimistic assumptions—namely, that federal discretionary spending will remain fixed in real terms and effective income tax rates will continue to remain at their current historically high levels, if not increase further.

If these projections fail to materialize, Social Security and Medicare's long-term financial shortfalls will force higher taxes or reduced benefits. Today's workers—the baby boomers—may end up bearing the brunt of these adjustments if payroll taxes are hiked before and benefits are cut after they retire. Social Security's shaky foundation and uncertainty about how the system will be reformed imply a greater need for baby boomers to save more to preserve their living standards after retirement.

SAVING INCENTIVES

Retirement-saving incentives introduced relatively recently—especially 401(k) plans and IRAs—have been successful in increasing saving among some groups. Recent research suggests that along with Social Security, Medicare, and private pensions, the accumulated assets in these plans will constitute a substantial fraction of retirement resources for these individuals. Some of these groups may be on track to maintain preretirement living standards when they retire.

However, a large segment of workers are either not covered by or do not participate in these plans. Those who are covered and participate generally tend to be individuals with very high incomes and those working in large firms. A sizable portion of workers (especially those in small firms, which often do not offer such plans) may not be on track to garner sufficient assets for financing postretirement consumption close to the level they enjoyed before retirement. As a result, such households will remain completely or mainly dependent on Social Security.

HOW MUCH SAVING IS ADEQUATE?

These observations raise an obvious question: How much must Americans save to adequately prepare for retirement? Obviously, the answer depends upon what one considers "adequate." One view is that current saving is adequate if it enables a household to maintain its living standard at its "sustainable" level (both before and after retirement). The "sustainable" living standard is the highest constant standard that the household can maintain from today onward given its current assets (in tax-favored and non-tax-favored accounts), projected income (wages and salaries, defined benefit pensions, expected gifts and inheritances, etc.), and anticipated expenditures (such as children's college education, expected out-of-pocket medical expenses, and so on). After calculating the sustainable living standard, one can also find out how much the household must save out of its current (and projected) income in order to maintain that living standard.⁶

TABLE 1 SAVING RATES NEEDED TO MAINTAIN LIVING STANDARDS AT SUSTAINABLE LEVELS

Income	0-15,000	15,000-45,000	45,000-100,000	100,000+
Age 50-55	1	13	14	17
Age 56-61	0	17	20	23

SOURCE: Douglas B. Bernheim, Lorenzo Forni, Jagadeesh Gokhale, and Laurence J. Kotlikoff,

"The Adequacy of Life Insurance: Evidence from the Health and Retirement Survey,"

American Economic Review (Papers and Proceedings), May 2000, pp. 288-92.

Table 1 shows that the average saving rates needed to maintain living standards at their sustainable levels are small for very low-income households. This result is not surprising because such households have low asset levels and their Social Security benefits replace almost all of their preretirement earnings. Hence, they depend on Social Security to finance almost fully their postretirement consumption. The required saving rates are substantially larger at higher income ranges. Such households have higher asset levels, and their Social Security benefits do not replace a sizable fraction of earnings lost due to retirement.

Calculations suggest that middle- and upper-income households would not be able to maintain their living standards at their sustainable levels simply by reinvesting the interest income on their non-tax-favored assets. Rather, they would have to save a sizable fraction of their earnings to smooth consumption and preserve their living standards throughout their remaining lifetimes. While sobering, these calculations are based upon the optimistic assumption that Social Security will continue to pay benefits at currently promised levels. Under the alternative assumption that Social Security benefits are cut to balance the program's long-term budget imbalance, the saving rates required to maintain living standards (at pre-benefit-cut sustainable levels) would be higher still.

CONCLUSION

Many observers attribute the strong U.S. economic performance since 1995 to robust consumption growth and are calling for more of the same. In the United States, private and government consumption growth have outpaced output growth for the last two decades. This trend is unsustainable, however: If an ever-increasing share of output is consumed, less will be available for financing investment. Domestic capital formation has, indeed, followed the pattern of national saving over time in the United States. Although domestic investment may remain higher than national saving via foreign borrowing, this reduces U.S. nationals' claims on domestic output. Over time, greater foreign indebtedness will also reduce U.S. nationals' living standard relative to that feasible by financing domestic investment through our own saving.

Saving enables us to transfer consumption across time—from the earning to the retired stage of life—and to better configure the collection of goods and services consumed. Low saving by U.S. households may adversely impact their ability to maintain their living standards during retirement—a challenge that will only gain in difficulty with lengthening life spans. Calculations suggest that household saving rates required to maintain living standards are quite high, especially for those in the middle and upper income levels. If households—especially those approaching retirement—were more aware of the gap between their actual saving and that required for maintaining their living standards, they might begin to save more.

Footnotes

¹ In this measure, household spending includes purchases of durable goods. Government purchases are defined as government expenditures on consumption and gross investment net of its consumption of fixed capital.

² There is a case to be made that any decomposition of net national saving into private and government saving is arbitrary in that it reflects nothing more than the choice of accounting labels attached to various transactions between the two sectors. For example, households may view their social insurance contributions (payroll taxes) as their own saving for retirement, and this perception may influence their saving out of personal income. Calling these payments "government borrowing" rather than "taxes," and calling Social Security benefits "repayment of principal plus interest" rather than "transfers," would result in a different decomposition of national saving into private and government saving.

³ The decadal average growth in the sum of nominal personal consumption expenditures plus government purchases was 7 percent during the 1960s, 10 percent during the 1970s, 8.1 percent during the 1980s, and 2.8 percent during the 1990s. The corresponding growth in nominal net national product was 7.0, 10.1, 7.5, and 2.7 percent.

⁴ This figure consists of US-owned assets abroad minus foreign-owned assets in the United States.

⁵ According to the latest Social Security trustee report, a tax hike or a benefit cut will become unavoidable by 2013 to close the gap between the program's revenues and outlays. The report estimates that increasing payroll taxes by 1.9 percent immediately would eliminate the gap over a 75-year horizon. However, this estimate probably understates the true size of the funding shortfall because it ignores deficits that will accrue in year 76 and later and because, relative to historical evidence, the report's underlying demographic assumptions underestimate future improvements in survival rates.

⁶ Allowance is made for the earlier death of one spouse in a two-adult household.